



# *The WindHover Project*

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Requests for information on The WindHover Project may be made to:

Dr. Jay Torres  
9704 South 20th Street  
Bellevue, NE 68123

Genie: WindHover  
CompuServe: 71405,672



## From Headquarters

Hello once again from the not so warm and sunny mid-west. Snow and ice season is here once again courtesy of Old Man Winter. Ah, for the sunny climes of Hawaii...

This time around we have a new addition to the hardware series, namely converting a black and white television set into a monitor. We also include a first hand review of the new Mega ST courtesy of the Doctor himself and talk a bit about the newest graphics standard, the GIF or Graphics Interchange Format standard. This one holds a lot of promise not just for the ST users in our midst, but the 8 bit wonders whose company we enjoy.

The current crop of 8 bit software and hardware is still disappointing. The 80 column board everyone raves about is still vaporware for many of us. The new 5 1/4" drive giving us double sided, double density capability is drawing yawns from many Atarians since ADOS is still in limbo status and lets not forget the incredible SX212 1200 baud modem which actually operates at 1170 baud! Sounds like someone at Apple Computers is working at Atari now. They had this same problem last year with their modems on the GS. Sigh.

Have you seen the new laserprinter from Atari yet? This baby is a screamer! Hooked up to an ST, this Canon engine driven printer puts out astounding graphics and text. We know that but have you tried hooking it up to an 8-bit yet? The image on the screen may be good but man oh man! the hardcopy fills in all the details you've been missing from your 9 pin or 24 pin printers. Hooking it up to the 850 interface is a snap thanks to the documentation. The price is still a little steep but combined with a 130XE equipped with the 130XE SuperRam Mod or an Atari 816 with the Projects Printing Press System this presents us 8-biters with an extremely powerful system for even less than the ST version.

On the latest developments at COMDEX Atari gave a lot of companies something to think about.

The news for 8 bit systems comes not from the 6502 side of the fence but the 8086 side of the fence. Atari has formally debuted not only its IBM PC compatible system but an IBM PC-AT compatible system as well!

The new MS-DOS system features all of the standard PC-AT type features (EGA Graphics, 1 Meg of memory with extendability under LIM 4.0 standards, a fast 20 Meg hard disk drive, etc.) for the unheard of price of \$700 with a color monitor. This new system reportedly runs at 8MHz with a 12MHz version in the works. Admittedly, some people looked at it and wondered how Atari could possibly compete with Big Blue, but there were quite a few companies putting in their orders.

The new Mega STs were there in all their glory with the new

blitter chips. The monitors were the same but with a difference according to the Atari rep: the resolution could be boosted up to 1024 x 1024 (in color!) with an internal jumper change. This is made possible due to an internal buffer system used by the monitor itself. If this is true, it opens up a new horizon in terms of graphics.

Finally, the news on the 8 bit line was given out to the "old timers". Atari will continue to provide its support to the 8 bit systems and encourage third party developers to create new software. Atari will not, however, continue on with its software development division for the 6502 line of computers. This was a serious, but not unexpected, setback for the Atari 8 bit community. In essence, we will have to provide more support to those software companies which support us in turn. The next few months will tell how this will turn out for us.

As long as I'm on the subject, the proposed Atarian Federation is beginning to gather some support. So far, I have gotten word back from Caltari in Canada and a few of our fellow clubs here in the U.S. While we still need to develop a formal charter and divide some areas of responsibility the road seems clear: The Atarian Federation will become a reality as long as more groups are willing to join in to speak with one voice. This is probably the best way to insure the survival of the 8 bit line and force Atari to recognize we will not simply curl up and go away.

If you would like your user group to become part of this effort then write a letter to us here at The WindHover Project and let us know. Together we can create a network which will insure our interests are met.

## **Hardware Enhancements Revisited BW TV to Monitor Conversion**

**by The Doctor**

Note: The author and The WindHover Project assume no responsibility for damages or injuries which may occur as a result of this modification. If you are unsure of your abilities then please get someone else to help you.  
If followed correctly this mod works.

Many of us have our Ataris hooked up to a color television set for our word processing. While this generally works alright, reading the letters with the characteristic color bleeding gets irritating to the eyes. As a result, we switch over to a black and white television set for word processing to do 80 column work. The drawback here, however, is the RF input to the t.v. generally makes it a bit hard to read the letters.

This article will describe how to modify a Samsung Model UFJ-1 12 inch black and white television set to work as a monitor. This set can normally be purchased at K-Mart for around \$40.00.



First, if you already own one, insure the television set is unplugged from any outlet for at least 24 hours. This is to insure the internal capacitor has ample time to completely drain. 20,000 volts up your arm is not a great way to start this project so watch out!

Next, remove the rear cover by undoing the four screws located on the rear of the unit. When you take the cover off, be sure to remove the antenna connectors so you can have enough room to work. You do not have to remove the power cord for this project.

Now, pull the motherboard at the base of the unit out about three inches. Be careful not to break or pull out any of the wires running to the CRT tube.

Locate IC 101 on the motherboard near the center. Working from the rear side of the board, connect a two foot piece of heavy wire wrap to pin number 14, the pin controlling video detect/amplification and tuner agc functions.

Next, connect a two foot piece of wire wrap to pin number 27 which controls the horizontal drive/ground.

You will need to put two RCA phono plugs on the rear cover of the t.v. at this point. Using one jack, connect the wire from pin 14 of IC 101 to the outside of the jack. Connect the wire from pin 27 of IC 101 to the center lug of the phono plug. Using the center lug of the second jack connect one wire to the positive side of the speaker of the t.v. set.

Carefully push the motherboard back into the t.v. casing, put the cover back on the set and put the screws back in place. Fire up the set and insure you are getting a normal picture. If the picture is anything but normal, turn it off and recheck your wiring.

If everything seems alright, disconnect the antenna, put the selector onto an unused channel and connect your Atari with a monitor cord, using the composite video line for video input and the sound output. Turn on the system and relish the clear image you now have. You will also enjoy sound as well. If you have an 80 column driver, boot it up and enjoy! Eyestrain will be a thing of the past.

## **The 4 Meg Mega ST - A review**

**by Dr. Jay Torres**

After using the 1040 system I've had for the past six months what could possibly make me switch? The new Mega of course. Specifically the 4 Megabyte version. This article is my impressions on the new system and what I have discovered about it since having gotten it.

Why a Mega ST? Memory and speed were the primary factors along with the amount of memory in the system. I can do a lot with 4 megabytes and the price difference with the 2 meg version wasn't that much more. On to the review.

First off, the keyboard has a MUCH better feel to it. There is improved tactile feedback and stiffness to the keys over the old "1040" I had. For me, this makes a big difference.

Next, the drives are much better also. Formatting takes about 20% less time and drive access is noticeably improved. Faster reading and writing makes for less wasted time in my book. The electrical connectivity problems I experienced with the I/O ports of the 1040 have been resolved. Standard connectivity is just that now, standard! Needless to say, I no longer have to worry about smoke from the back of the unit!

Okay, so how about the software side of this new monster? Great! The operating system is much improved with software controlled I/O smoothed out and memory management streamlined. The mouse interface produces continuous screen horizontal/vertical scrolling like it always should have and the overall "feel" is much better. The drop down menu system is faster and window manipulation is cleaned up considerably.

The Blitter chip is a real blessing for those of us who enjoy graphics. Depending on the application, screen refreshment and redrawing is speeded up from 30 to 80 percent. If you use CAD packages speedup can approach almost 125 percent because of the way the screen is now managed by the OS. The blitter can be shut off at bootup or prior to the start of your application by bit selection on the MMU or internal OS setting. Quick and simple. I like this since a few of my programs are a bit "naughty" programming wise and the developers took a shortcut or two. This keeps any of my applications which run fine on a 1040 from becoming useless.

Overall, at \$1800 for a color system I am extremely satisfied with the Mega. Faster program execution, a cleaner OS, faster graphics and upward compatibility with the 520/1040 ST makes this a winner in my book. Jack, you done good.

## **Graphics Interchange Format**

**by Orion**

Question: What started out on a Atari 800, was embellished on an IBM-XT, smoothed out on a MacIntosh, contoured on an Amiga and finalized on a Mega ST for printout?

Answer: This months WindHover Project Cover.

Wait a minute, you ask. Just how can that be? That means one picture file was worked on by five different computers! You can't



do that, at least not easily. Yes, you can.

A new graphics standard, called the Graphic Interchange Format or GIF, made its debut this summer and promises to change the way graphics are handled between different computers. This standard defines a new file format beyond the RLE format currently in use.

Essentially, GIF defines color usage, bit manipulation, scan width and display resolution on a software protocol which allows all of the graphics information to be compressed and displayed on any system which has GIF systems software. In addition, it allows for translation between the RLE format and itself, allowing a bridge to be created not only between hardware systems, but software applications as well.

For instance, the cover was created with MicroIllustrator/Touch Tablet system on the Atari, translated to RLE format, ported to the IBM, worked on with MS Windows PAINT, transferred to the Mac in GIF format, preened with MacPaint, put on the Amiga in RLE format, smoothed and finally sent to the ST in GIF format for final printing through NeoChrome.

So what? Why would I want to do any of that? Considering how long it can take to translate a picture graphic from one system to another, if indeed it can be done at all, this creates a virtual flood of graphics available for the entire microcomputer community.

Want a geisha on your screen? See yourpal with the Mac. How about a screen dump of Star Raiders? See yourlocal Atarian. How about a shot of the Shuttle in 3-D with partial interior shots? See your IBM friend with the AutoCad file. The list goes on and on.

For more specific information on the technical aspects of GIF, look at the July issue of Computer Shopper which goes into a LOT of detail. If you want more graphics for your system, now you can look beyond your own back yard.

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CompuServe: 71405,672



San Leandro Computer Club  
P.O. Box 1506  
San Leandro, CA 94577-0374  
ATTN: Newsletter Editor

*Note: This is our third newsletter to  
this address. If it still doesn't arrive  
we give up! J.T.*

